



443592

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

Date: August 4, 2003

To: Dan Chesterson
Brownfields/SI SectionThru: Craig Barker
Steve BuckelFrom: Craig A. Pender
OLQ Chemistry SectionSubject: Analytical Results for Beck's Lake
South Bend, St. Joseph Co., Indiana
Site # IND980904379
Sampled: July 16, 2003
Sample Numbers: S1 – S22
Laboratory: CEIMIC

The analytical results for the samples identified above have been validated according to the quality criteria contained in RISC Technical Guidance Manual and Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Third Edition, Update III. Based on the evaluation, it has been determined that the results are acceptable for use. Reasons that data are qualified as estimated or unusable are explained below.

General Comments:

The purpose of this event is unknown since no field documentation was included with the data package. The collected samples were analyzed for metals (Aluminum, Antimony, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, and Zinc).

Sampling Quality Assurance/Quality Control:

Field documentation did not allow for interpretation of the data. No field documentation was included with the data package. No interpretation of the data can be made.

Field duplicate samples are used to establish the representativeness of field sampling (i.e., the homogeneity and sample variability). The duplicate samples for this study were not in good agreement. Results for Silver, Chromium, and Magnesium are estimated.

Field blanks (trip and/or equipment) are used to identify sample contamination resulting from sampling equipment, sample containers, chemical preservatives, and the handling and

transportation of samples. The trip blank was not needed because VOC samples were not collected. It is unknown if an equipment blank was collected. Since no field documentation was included, it is unknown how the samples were collected (i.e. if dedicated equipment was used or not).

It can't be determined if the sample holding time requirements were met for these samples. The date the samples were received at the lab was reported, but not the analysis date. The laboratory should report the analysis date in future sample analysis. All sample results will be estimated.

Laboratory Quality Assurance/Quality Control:

The laboratory performed all quality assurance/quality control (QA/QC) measures necessary to validate the analytical results for this sampling event. The data was determined to be valid. Based on the validation of the analytical results, the following comments and/or qualifications are made regarding the data:

Metals Analysis

Samples were analyzed for Aluminum, Antimony, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, and Zinc by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES). Most criteria were satisfactory.

Aluminum, Barium, Beryllium, Calcium, Magnesium, Nickel, Cobalt, Sodium, Copper, Iron, Manganese, and Cadmium were detected in both the initial and continuing calibration blanks (ICB and CCB). The results for these compounds will be estimated.

Lead had a low percent recovery in the ICP interference check sample analysis (ICS). Results for Lead will be estimated.

Antimony and Selenium had low Matrix Spike recoveries. Results for Antimony and Selenium will be estimated biased low due to possible matrix interference.

Arsenic, Beryllium, Cadmium, Calcium, Cobalt, Copper, Magnesium, Potassium and Sodium had ICP Serial Dilution Analysis percent difference (%D) greater than the control limit of 10%. Results for these compounds will be estimated.

Antimony, Selenium, and Thallium were analyzed using laboratory reporting limits above their respective RISC Residential Default Closure Levels. In future sampling events, the laboratory should use a method to obtain lower reporting limits for these compounds.

Mercury Analysis

Samples were analyzed for Mercury by Cold Vapor Atomic Absorption (CVAA). All criteria were satisfactory.

Results:

Arsenic and Lead were detected above their respective RISC Residential Default Closure Levels (3.9 ppm and 81 ppm respectively) in several of the soil samples collected. Antimony was detected in sample S1 and S22 (2nd duplicate sample) above its RISC Residential Default Closure Level of 5.4 ppm. Cadmium was detected in samples S11 (2nd duplicate sample) and S22 (2nd duplicate sample) above its RISC Residential Default Closure Level of 7.5 ppm. Selenium was detected in sample S11 (2nd duplicate sample) above its RISC Residential Default Closure Level of 5.2 ppm. Thallium was detected in samples S11 (2nd duplicate sample) and S22 (2nd duplicate sample) above its RISC Residential Default Closure Level of 2.8 ppm. See attached tables for complete sample results. Chromium was detected in samples S2, S11 (2nd duplicate sample), S19 and S22 (2nd duplicate sample) above its RISC Residential Default Closure Level of 38 ppm.

Conclusions:

Several estimated sample results are above RISC Residential Default Closure Levels. The data is usable, however, no further interpretation of data can be made since sample locations and the project goals are unknown.

Attachments

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

SITE AND SAMPLING INFORMATION

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Push Button to Print Page:

RCRA Metals & Primary Standards

Metals Secondary Standards

General Chemical Analysis

Volatile Organic Analysis

Semi-volatile Organic Analysis

PCBs/Pesticides/Herbicides

TCLP Metals

Sample #		Type/ID#
Lab	IDEM	
ME1MB0	S1	
ME1MB1	S2	
ME1MB2	S3	
ME1MB3	S4	
ME1MB4	S5	
ME1MB5	S6	
ME1MB6	S7	
ME1MB7	S8	
ME1MB8	S9	
ME1MB9	S10	
ME1MC0	S11	
ME1MC0D	S11-DUP	
ME1MC0S	S11-DUP2	
ME1MC2	S12	
ME1MC3	S13	
ME1MC4	S14	
ME1MC5	S15	
ME1MC6	S16	
ME1MC7	S17	
ME1MC8	S18	
ME1MC9	S19	
ME1MD0	S20	
ME1MD1	S21	
ME1MD2	S22	
ME1MD2D	S22-DUP	
ME1MD2S	S22-DUP2	

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

RCRA Metals & Non-RCRA Primary Standards

Site Name: Beck's Lake
 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Water

UNITS: mg/L

Sample #		Type/ID#	As	Ba	Cd	Cr	Pb	Hg	Se	Ag	Sb	Be	Ni	Tl
Lab	IDEM	D.L.>												
Action Level >														
ME1MB0	S1													
ME1MB1	S2													
ME1MB2	S3													
ME1MB3	S4													
ME1MB4	S5													
ME1MB5	S6													
ME1MB6	S7													
ME1MB7	S8													
ME1MB8	S9													
ME1MB9	S10													
ME1MC0	S11													
ME1MC0D	S11-DUP													
ME1MC0S	S11-DUP2													
ME1MC2	S12													
ME1MC3	S13													
ME1MC4	S14													
ME1MC5	S15													
ME1MC6	S16													
ME1MC7	S17													
ME1MC8	S18													

* BLANK (Type indicated)

** FIELD DUPLICATE

Empty Box indicates NON-DETECTABLE

NR = NOT RUN

NA=NOT AVAILABLE

Estimated

Bold = above action level or MCL

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Metals Analysis (Page 1)

Site Name: Beck's Lake
 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Soil

UNITS: mg/kg

Sample #		Type/ID#	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg
Lab	IDEM	D.L.>													
RISC Residential Default Closure Level				5.4	3.9	1,600	63	7.5		38		580		81	
ME1MB0	S1		4,690	25.5	4.2	122	0.60 J	1.1	5,220	16.3	3.2 J	25.0	7,500	167	1,760
ME1MB1	S2		4,920		2.1 J	61.7	0.75 J	2.0	39,600	74.6	2.8 J	13.7	11,100	70.0	10,300
ME1MB2	S3		4,300		3.8	78.8	0.55 J	1.2	4,230	9.7	2.6 J	23.0	6,730	166	1,010 J
ME1MB3	S4		5,010		4.4	76.3	0.53 J	0.89 J	4,740	10.2	2.7 J	22.9	7,360	248	1,510
ME1MB4	S5		4,550		2.6 J	60.0	0.39 J	0.67 J	2,960	7.9	1.7 J	19.7	4,030	179	942 J
ME1MB5	S6		4,820		3.5	73.7	0.57 J	1.1	4,840	14.3	2.3 J	22.0	5,920	306	1,570
ME1MB6	S7		5,570		2.8 J	54.5	0.45 J	0.56 J	3,380	9.5	1.7 J	17.8	4,420	81.5	1,040
ME1MB7	S8		4,970		2.2 J	54.5	0.45 J	0.61 J	3,190	8.8	1.7 J	19.6	4,590	90.8	985 J
ME1MB8	S9		4,920		10.7	120	0.79 J	2.1	3,620	29.0	5.4 J	33.3	20,200	238	1,300
ME1MB9	S10		5,060		1.9 J	49.0	0.36 J	0.80 J	2,020	12.8	1.5 J	13.0	3,580	60.5	748 J
ME1MC0	S11		6,680		3.5	92.1	0.44 J	0.79 J	2,010	21.6	4.6 J	10.8	8,450	22.0	1,370
ME1MC0D	S11-DUP		5,680		3.3	84.2	0.40 J	0.70 J	1,810	20.6	4.1 J	10.2	7,310	20.7	1,190
ME1MC0S	S11-DUP2		7,280	3.9 J	10.2	443	8.7	9.1	1,910	56.0	90.8	54.0	8,820	25.2	1,300
ME1MC2	S12		4,950		7.3	94.5	0.58 J	1.4	15,000	12.1	3.0 J	34.5	13,800	124	2,480
ME1MC3	S13		1,950		5.4	28.4 J	0.34 J	1.4	13,000	5.3	2.0 J	14.7	6,830	28.7	3,020
ME1MC4	S14		4,630		7.2	84.7	0.40 J	3.3	21,600	10.4	3.0 J	15.3	10,500	82.8	2,680
ME1MC5	S15		4,800		26.2	103	1.0 J	1.6	11,500	9.9	4.3 J	35.9	16,900	95.8	1,970
ME1MC6	S16		5,680		13.0	92.4	0.52 J	1.5	13,000	12.3	3.8 J	24.0	15,000	67.9	2,390
ME1MC7	S17		4,240		24.7	110	0.44 J	3.3	11,800	15.8	6.8 J	76.5	44,200	143	2,920
ME1MC8	S18		2,450		8.0	37.3 J	0.23 J	0.97 J	11,000	29.6	1.7 J	17.3	7,420	30.8	1,730
ME1MC9	S19		6,140		32.9	147	0.46 J	7.3	13,900	152	5.1 J	70.5	15,700	137	3,930
ME1MD0	S20		4,180		10.1	65.2	0.50 J	1.2 J	19,400	11.3	4.2 J	21.7	13,100	47.7	3,580
ME1MD1	S21		3,390		11.7	67.8	0.32 J	0.70 J	16,600	7.6	2.5 J	11.4	9,950	39.9	2,340
ME1MD2	S22		3,200		12.0	87.3	0.28 J	0.97 J	37,700	8.7	2.7 J	14.3	12,800	47.4	3,360
ME1MD2D	S22-DUP		3,320		13.0	104	0.31 J	1.0	40,300	6.7	3.0 J	14.8	14,800	55.0	4,180
ME1MD2S	S22-DUP2		4,140	5.9 J	22.4	601	12.8	14.0	41,400	57.4	131	78.1	13,800	54.3	3,320

* BLANK (Type indicated)

Empty Box indicates NON-DETECTABLE

Estimated

** FIELD DUPLICATE

NR = NOT RUN

NA=NOT AVAILABLE

Bold = above action level

J = COMPOUND DETECTED ABOVE METHOD DETECTION LIMIT BUT BELOW LABORATORY REPORTING LIMIT

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Metals Secondary Standards

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Water

UNITS: mg/L

Sample #		Type/ID#	Al	Ca	Cu	Fe	Mg	Mn	K	Na	Zn
Lab	IDEM	D.L.>									
Action Level >											
ME1MB0	S1										
ME1MB1	S2										
ME1MB2	S3										
ME1MB3	S4										
ME1MB4	S5										
ME1MB5	S6										
ME1MB6	S7										
ME1MB7	S8										
ME1MB8	S9										
ME1MB9	S10										
ME1MC0	S11										
ME1MC0D	S11-DUP										
ME1MCOS	S11-DUP2										
ME1MC2	S12										
ME1MC3	S13										
ME1MC4	S14										
ME1MC5	S15										
ME1MC6	S16										
ME1MC7	S17										
ME1MC8	S18										

* BLANK (Type indicated)

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OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Metals Analysis (Page 2)

Site Name: Beck's Lake
 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Soil

UNITS: mg/kg

Sample #	Type/ID#	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
Lab	IDEM	D.L. >									
RISC Residential Default Closure Level			2.1	950		5.2	31		2.8		10,000
ME1MB0	S1		241	0.14	6.5 J	283 J		134 J		13.1	165
ME1MB1	S2		345	0.13	6.4 J	469 J		198 J		12.6	89.5
ME1MB2	S3		164	0.16	8.6	610 J		78.6 J		11.3	148
ME1MB3	S4		212	0.11	5.4 J	507 J		125 J		15.6	142
ME1MB4	S5		87.9	0.091 J	4.3 J	315 J		90.6 J		10.0 J	104
ME1MB5	S6		146	0.13	6.1 J	279 J		92.7 J		13.3	152
ME1MB6	S7		78.6	0.058 J	4.4 J	373 J		148 J	0.57 J	10.5	62.2
ME1MB7	S8		83.7	0.073 J	4.9 J	375 J		174 J		9.9 J	71.6
ME1MB8	S9		234	0.23	26.2	405 J		127 J		18.2	222
ME1MB9	S10		69.8	0.079 J	4.5 J	243 J		39.5 J		7.8 J	47.8
ME1MC0	S11		480	0.062 J	7.4	637 J		38.7 J		14.5	75.2
ME1MC0D	S11-DUP		426	0.070 J	6.3 J	549 J		40.9 J		12.5	65.2
ME1MCOS	S11-DUP2		546	0.59	94.1	670 J	5.9 J	7.1	37.1 J	9.5	93.9
ME1MC2	S12		234	1.0	7.3 J	673 J		69.9 J		18.1	126
ME1MC3	S13		145	0.080 J	4.1 J	180 J		47.9 J		14.1	58.7
ME1MC4	S14		213	0.098 J	6.0 J	577 J		58.6 J		13.5	100
ME1MC5	S15		288	0.16	10.6 J	677 J		82.8 J		15.8	137
ME1MC6	S16		120	0.15	8.9 J	399 J		104 J		18.8	81.0
ME1MC7	S17		238	0.18	18.2	357 J		152 J		18.3	268
ME1MC8	S18		77.5	0.071 J	4.2 J	487 J		50.7 J		10.7 J	52.9
ME1MC9	S19		438	0.92	17.3	779 J	2.0 J	97.7 J		17.3	829
ME1MD0	S20		249	0.077 J	8.9 J	439 J	0.17 J	211 J		14.3	85.9
ME1MD1	S21		198	0.089 J	4.8 J	430 J		61.8 J		10.8 J	48.0
ME1MD2	S22		307	0.076 J	5.1 J	321 J		81.0 J		10.3 J	62.3
ME1MD2D	S22-DUP		313	0.090 J	6.1 J	363 J	0.17 J	78.0 J		10.9 J	62.0
ME1MD2S	S22-DUP2		448	0.72	133	389 J	11.5	81.8 J	9.7	134	182

* BLANK (Type indicated)

Empty Box indicates NON-DETECTABLE

Estimated

** FIELD DUPLICATE

NR = NOT RUN

NA=NOT AVAILABLE

Bold = above action level

J = COMPOUND DETECTED ABOVE METHOD DETECTION LIMIT BUT BELOW LABORATORY REPORTING LIMIT

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

General Chemical Analysis

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Water

UNITS: mg/L

Sample #	Type/ID#	BOD	COD	DO	Cl-	SO4-	Bacti (E. Coli)	Lab pH	Specific	TDS	TSS	Total Solids	TOC	TOX	Phenols	Ammonia-N	Nitrate-N	Nitrite-N	Nitrate + Nitrite-N
Lab	IDEM								Conductance										
	D.L.>						<1	0.1 S.U.	1.0 umhos/cm										
	MCL >	<5'	5 - 15'	>4'	250	250	Zero		<1000 uohms	500						3 - 6'	10	1	10
ME1MB0	S1																		
ME1MB1	S2																		
ME1MB2	S3																		
ME1MB3	S4																		
ME1MB4	S5																		
ME1MB5	S6																		
ME1MB6	S7																		
ME1MB7	S8																		
ME1MB8	S9																		
ME1MB9	S10																		
ME1MC0	S11																		
ME1MC0D	S11-DUP																		
ME1MC0S	S11-DUP2																		
ME1MC2	S12																		
ME1MC3	S13																		
ME1MC4	S14																		
ME1MC5	S15																		
ME1MC6	S16																		
ME1MC7	S17																		
ME1MC8	S18																		

* BLANK (Type indicated)

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Estimated

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NR = NOT RUN

NA=NOT AVAILABLE

Bold = above Maximum Contaminant Level (MCL) or IDEM Acceptable Ranges
or above Secondary Maximum Contaminant Level (SMCL)

¹ IDEM Acceptable Ranges (Drinking Water Branch).

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

General Chemical Analysis

Site Name: Beck's Lake
 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Soil / Sediment / Sludge

UNITS: mg/kg

Sample #		Type/ID#	chloride	sulfate	lab pH	TOC	TOX	phenols	cyanide	sulfide	ammonia-N	nitrate-N	nitrite-N
Lab	IDEM												
		D.L.>			0.1 S.U.								
Action Level >													
ME1MB0	S1												
ME1MB1	S2												
ME1MB2	S3												
ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
ME1MC0	S11												
ME1MC0D	S11-DUP												
ME1MCOS	S11-DUP2												
ME1MC2	S12												
ME1MC3	S13												
ME1MC4	S14												
ME1MC5	S15												
ME1MC6	S16												
ME1MC7	S17												
ME1MC8	S18												

* BLANK (Type indicated)

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Estimated

** FIELD DUPLICATE

NR = NOT RUN

NA=NOT AVAILABLE

Bold = above action level

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Volatile Organic Analysis

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Water

UNITS: ug/L

Sample #		Type/ID#											
Lab	IDEM												
		D.L.>											
Action Level >													
ME1MB0	S1												
ME1MB1	S2												
ME1MB2	S3												
ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
ME1MC0	S11												
ME1MC0D	S11-DUP												
ME1MCOS	S11-DUP2												
ME1MC2	S12												
ME1MC3	S13												
ME1MC4	S14												
ME1MC5	S15												
ME1MC6	S16												
ME1MC7	S17												
ME1MC8	S18												

* BLANK (Type indicated)

** FIELD DUPLICATE

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Estimated

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OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Volatile Organic Analysis

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Water

UNITS: ug/L

Sample #		Type/ID#										
Lab	IDEM											
		D.L.>										
Action Level >												
ME1MB0	S1											
ME1MB1	S2											
ME1MB2	S3											
ME1MB3	S4											
ME1MB4	S5											
ME1MB5	S6											
ME1MB6	S7											
ME1MB7	S8											
ME1MB8	S9											
ME1MB9	S10											
ME1MC0	S11											
ME1MC0D	S11-DUP											
ME1MCOS	S11-DUP2											
ME1MC2	S12											
ME1MC3	S13											
ME1MC4	S14											
ME1MC5	S15											
ME1MC6	S16											
ME1MC7	S17											
ME1MC8	S18											

* BLANK (Type indicated)

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OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Volatile Organic Analysis

Site Name: Beck's Lake
Site Number: IND980904379
Location: South Bend, St. Joseph Co., Indiana
Date Sampled: 16-Jun-03
Date Reported: 21-Jul-03
Sample Numbers: S1 - S22
Lab: CEIMIC

Water

UNITS: ug/L

Sample #		Type/ID#											
Lab	IDEM												
		D.L.>											
Action Level >													
ME1MB0	S1												
ME1MB1	S2												
ME1MB2	S3												
ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
ME1MC0	S11												
ME1MC0D	S11-DUP												
ME1MCOS	S11-DUP2												
ME1MC2	S12												
ME1MC3	S13												
ME1MC4	S14												
ME1MC5	S15												
ME1MC6	S16												
ME1MC7	S17												
ME1MC8	S18												

* BLANK (Type indicated)

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Estimated

Bold = above action level or MCL

OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Volatile Organic Analysis

Site Name: Beck's Lake
 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Soil / Sediment / Sludge

UNITS: ug/kg

Sample #		Type/ID#										
Lab	IDEM											
		D.L.>										
Action Level >												
ME1MB0	S1											
ME1MB1	S2											
ME1MB2	S3											
ME1MB3	S4											
ME1MB4	S5											
ME1MB5	S6											
ME1MB6	S7											
ME1MB7	S8											
ME1MB8	S9											
ME1MB9	S10											
ME1MC0	S11											
ME1MC0D	S11-DUP											
ME1MCOS	S11-DUP2											
ME1MC2	S12											
ME1MC3	S13											
ME1MC4	S14											
ME1MC5	S15											
ME1MC6	S16											
ME1MC7	S17											
ME1MC8	S18											

* BLANK (Type indicated)

** FIELD DUPLICATE

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ME1MB9	S10											
ME1MC0	S11											
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ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
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OLQ CHEMISTRY - REFER TO ATTACHED MEMO

Semi-Volatile Organic Analysis

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 Site Number: IND980904379
 Location: South Bend, St. Joseph Co., Indiana
 Date Sampled: 16-Jun-03
 Date Reported: 21-Jul-03
 Sample Numbers: S1 - S22
 Lab: CEIMIC

Water

UNITS: ug/L

Sample #		Type/ID#											
Lab	IDEM												
		D.L.>											
Action Level >													
ME1MB0	S1												
ME1MB1	S2												
ME1MB2	S3												
ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
ME1MC0	S11												
ME1MC0D	S11-DUP												
ME1MCOS	S11-DUP2												
ME1MC2	S12												
ME1MC3	S13												
ME1MC4	S14												
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Semi-Volatile Organic Analysis

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 Sample Numbers: S1 - S22
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Water

UNITS: ug/L

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ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
ME1MB6	S7												
ME1MB7	S8												
ME1MB8	S9												
ME1MB9	S10												
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ME1MC0D	S11-DUP												
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Soil / Sediment / Sludge

UNITS: ug/kg

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Soil / Sediment / Sludge

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OLQ CHEMISTRY - REFER TO ATTACHED MEMO

PCBs/Pesticides/Herbicides

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 Sample Numbers: S1 - S22
 Lab: CEIMIC

Water

UNITS: ug/L

Sample #		Type/ID#											
Lab	IDEM												
		D.L.>											
Action Level >													
ME1MB0	S1												
ME1MB1	S2												
ME1MB2	S3												
ME1MB3	S4												
ME1MB4	S5												
ME1MB5	S6												
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ME1MB8	S9												
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Soil / Sediment / Sludge

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Toxicity Characteristic Leaching Procedure

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Lab: CEIMIC

UNITS: mg/L

Sample #		Type/ID#											
Lab	IDEM	D.L.>											
Action Level >													
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ME1MB2	S3												
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